



Over the past several years, the economic changes in the United States appear to have significantly impacted hospitals and hospital labor trends. Key questions faced by hospital executives include how to best manage labor costs, and how to best allocate scarce resources and optimize hospital staffing to reduce expenses and improve patient care. As the economy begins to show signs of a recovery, and the pressure returns on nurse wages, attrition, and labor availability, executives are seeking to better understand the total cost of their labor, and how to successfully blend full-time and supplemental labor strategies.

In this survey, KPMG's 2011 U.S. Hospital Nursing Labor Costs Study, we take a look at the current condition of U.S. hospital labor costs and explore some of the issues that could shape a hospital's labor strategy in the coming years.

The survey was sent to a list of hospital executives throughout the United States, and we received responses from 120 senior executives, including CEOs, chief administrators, COOs, CFOs, and directors of human resources.

The responses from those at the heart of the industry give valuable insight into current challenges and future opportunities; they provide additional color on current trends in the United States and benchmarks that may be utilized when considering how to optimize your labor strategy; and they serve to better understand the fully loaded cost and productivity of a registered nurse. We're confident that you will find this a stimulating and thought-provoking read.

**KPMG** Advisory





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### **Executive summary**

KPMG's 2011 U.S. Hospital Nursing Labor Costs Study identifies several trends and benchmarks in relation to hospital nursing labor costs in the United States. Some of the key findings are summarized below.

Wages and other payroll costs appear to be only part of all-in hospital nursing labor costs. According to the survey, the all-in cost of full-time direct care registered hospital nurses is on average \$98 thousand per year (or \$45 per hour), assuming 100 percent productivity. Fully loaded payroll represents 76 – 78 percent of the total cost. The balance comes from nonproductivity costs (11 – 12 percent), insurance costs (8 – 9 percent), recruiting costs (1 – 2 percent), and other costs (1 percent).

Base wages on average represent 75 percent of fully loaded payroll and 57 percent of all-in cost. The balance comes from payroll tax, shift differential costs, overtime pay, holiday pay and paid time off, bonuses, pension contributions, and other costs.

Other than base wages, key drivers of all-in cost are payroll tax, shift differential, and insurance, followed by costs from holiday/paid time off, overtime, and training. There also appear to be significant additional "hidden" nursing labor costs, related to full-time direct care registered nurses, which are not as easy to quantify. These hidden costs are mainly the result of nonproductive labor hours and associated opportunity costs, as well as attrition and time required to fill a permanent direct care RN position. Nonproductive labor hours on average represent 13 percent of total hours.

Two-thirds of respondents currently make use of traveling or per diem nurses. The key reasons and decision criteria identified for the use of traveling or per diem nurses are supply and demand, and quality of the traveling nurses. These appear to be even more

important decision factors than cost. Some of the reasons given that enable some hospitals not to use traveling staff include the use of extra full-time staff, part-time employed staff, incentives to limit turnover and to encourage working overtime, as well as the current economic downturn leading to limited turnover. Many of these factors appear to raise cost and/or may be of a temporary nature (in the case of the economic downturn).

Traveling nurses are already widely utilized today, but the future trend is upward. On average, respondents feel 90:10 is the ideal ratio of full-time employed nurses to traveling or other temporary nurses. They also believe spend will on average increase or has increased 12 percent during 2010. As the economy begins to show signs of a recovery, and the focus on resource management and total cost of labor is expected to continue, the use of supplemental labor is expected to rise.





# Cost of full-time registered nurses

### Wages and other payroll costs are only part of the story

According to KPMG's 2011 U.S. Hospital Nursing Labor Costs Study, the all-in cost of full-time direct care registered hospital nurses is on average \$98 thousand per year (or \$45 per hour), assuming 100 percent productivity. Fully loaded payroll represents 76-78 percent of the total cost. The balance comes from nonproductivity costs (11 – 12 percent), insurance costs (8 – 9 percent), recruiting costs (1 – 2 percent), and other costs (1 percent).

The all-in cost is on average \$98 thousand per year (or \$45 per hour) at 100 percent productivity

	Total hospital cost p.a. (US\$'000, average hospital)	% of total	n <sup>(2)</sup>	Average cost p.a. (US\$'000, average hospital)	Average cost p.hr. (US\$, average hospital)	% of total	n <sup>(2)</sup>
Payroll costs, incl. wages	24,848	78%	60	75	35	76%	70
Insurance costs	2,555	8%	49	9	4	9%	63
Recruiting costs	409	1%	66	2	1	2%	65
Other costs	407	1%	42	1	1	1%	48
Nonproductivity costs (1)	3,713	12%	n/a	11	5	11 %	n/a
Total	31,932	100%	n/a	98	45	99%	n/a

Note: (1) Total costs assume 100% productivity and nonproductivity costs equivalent to an average 13% of payroll, per the respondents' average nonproductive hours;

Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study

As expected, fully loaded payroll's share of all-in costs is large, but respondents mentioned several other costs and cost sub-categories. Base wages appear to represent only 75 percent of fully loaded payroll. The remaining share of fully loaded payroll costs is incurred through payroll tax, shift differential costs, overtime pay, holiday pay and paid time off, bonuses, pension contributions, and other costs.

Insurance costs mainly include health insurance, but also workers' compensation, disability and life insurance, malpractice, and other costs.

Recruiting costs mainly include orientation and training costs, but also sign-on bonuses, relocation costs,

advertising, health screening costs, extraordinary turnover costs, and other minor costs.

Other costs may include benefits administration, payroll services, continuing education, and other minor costs.

Finally, respondents stated that nonproductive hours on average represent 13 percent of total full-time registered nurse hours, e.g., due to training, education, and personal Internet use. This suggests that additional costs can be attributed to nonproductivity and 13 percent of payroll costs should be added when determining all-in costs at 100 percent productivity. These costs may be even higher if the nonproductive hours are made up during overtime at an average 1.5x base pay.

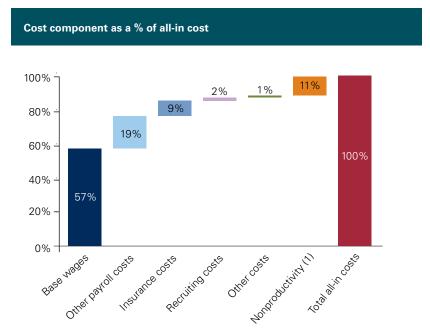
 $<sup>^{(2)}</sup>$  n = number of responses

### Base wages on average may represent 75 percent of fully loaded payroll and 57 percent of all-in cost

Respondents stated base wages of full-time registered hospital nurses are on average \$56 thousand per year (or \$26 per hour). This is slightly lower than the U.S. national average, as estimated by the BLS<sup>1</sup>, of \$67 thousand per year<sup>2</sup> (or \$32 per hour), but this may be a result of slightly older BLS data, margin of error, sample size, location, and nature of the surveyed hospitals and care facilities, and a slightly longer average work week used to calculate the respondents' hourly rates.

Respondents further indicated that base wages on average represent 75 percent of fully loaded payroll costs (\$75 thousand per year or \$35 per hour), and 57 percent of all-in fully loaded cost (\$98 thousand per year or \$45 per hour).

Base wages are on average \$56 thousand per year (or \$26 per hour)



Note: (1) All-in costs assume 100% productivity and nonproductivity costs equivalent to an average 13 percent of payroll, per the respondents' average nonproductive hours. Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study

<sup>&</sup>lt;sup>1</sup> Bureau of Labor Statistics, May 2009

<sup>&</sup>lt;sup>2</sup> Based on a "year-round, full-time" hours figure of 2,080 hours (40-hour work week) vs. the survey average of 2.157 hours (41-hour work week)

### There appear to be several key drivers of all-in cost, in addition to base wages

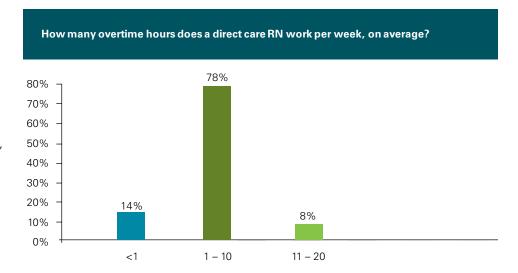
Several respondents stated that payroll tax, shift differential, and insurance are key cost drivers, followed by costs from holiday/paid time off, overtime, and training. Some of these are discussed in more detail below.

## Overtime is on average 4 hours per week

Respondents stated full-time direct care registered nurses on average work 41 hours per week. This does not seem surprising, but work hours appear to fluctuate from one week to another or from one nurse to another. A total of 78 percent of respondents stated overtime is between 1 and 10 hours per week. On average it is 4 hours per week, but 8 percent believe overtime is over 10 hours per week.

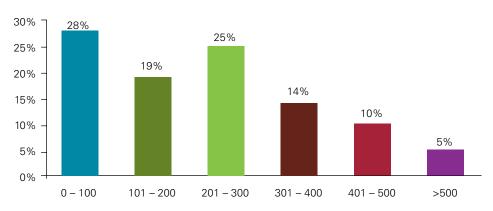
Approximately 99 percent of respondents stated that the typical overtime pay rate is 1.5 times the base pay. However, several respondents stated that this may be higher, e.g., a large hospital in Michigan stated, "We offer double time [the base pay] for RNs that pick up unfilled shifts."

When asked about recruiting costs, the majority of respondents feel most of the budget is reserved for new hire orientation and training needs with 72% of respondents stating that between 0 and 300 hours is spent on this (on average 233 hours or almost six work weeks).



Note: n = 93 Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study

### How long (in hours) is the typical new hire orientation and training program for a full-time RN?



Note: n = 110 Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study

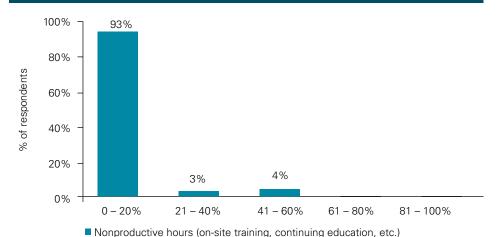
### There appear to be significant "hidden" nursing labor costs

Respondents indicated it is not easy to quantify all labor costs related to full-time direct care registered hospital nurses and mentioned various "hidden" costs. These hidden costs may be significant and are the result of nonproductive labor hours and associated opportunity costs, attrition, and time required to fill a permanent direct care RN position.

On average, 13 percent of hours are believed to be nonproductive hours

A total of 93 percent of respondents believe 0 – 20 percent of labor hours are nonproductive hours, such as time spent on training, education, or personal Internet use. On average, 13 percent of hours are believed to be nonproductive hours and 87 percent productive hours. This suggests that additional costs can be attributed to nonproductivity and 13 percent of payroll costs should be added when determining all-in costs at 100 percent productivity.

#### What is the estimated % of direct care RN hours dedicated to nonproductive hours?



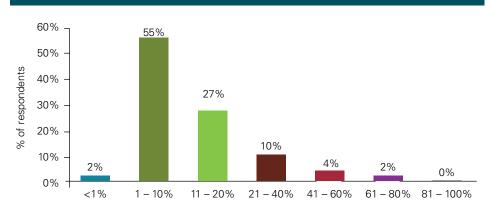
Note: n = 106

Approximately 82 percent of respondents stated annual attrition is between 1 percent and 20 percent, with an average attrition rate of 14 percent.

Respondents stated it takes on average 37 days, or over seven work weeks, to fill a permanent RN position. Taking into the account the 233 hours, or 28 work days, that are on average spent on new hire orientation and training, it appears attrition could have an impact of almost 65 work days, or 13 work weeks, on productivity related to the affected position.

### What is your estimated annual attrition rate?

Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study



Note: n = 100 Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study

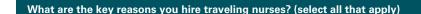
## Traveling or per diem nurses

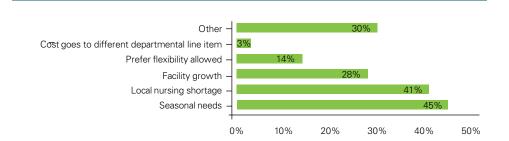
### Supply/demand and quality may be more important decision factors than cost

According to KPMG's 2011 U.S. Hospital Nursing Labor Costs Study, 65 percent of respondents currently make use of traveling or per diem nurses. The key reasons and decision criteria identified for the use of traveling or per diem nurses appear to be supply and demand, and quality of the traveling nurses. Some of the reasons given that enable some hospitals not to use traveling staff include: excess supply of staff, part-time employed staff, incentives to limit turnover and to encourage working overtime, and the current economic downturn leading to limited turnover. Many of these factors appear to raise cost and/or may be of a temporary nature (in the case of the economic downturn).

Key reasons to hire traveling nurses appear to be seasonal needs (45 percent of respondents), local nursing shortage (41 percent), and facility growth (28 percent)

When prompted, the key reasons to hire traveling nurses appear to be seasonal needs (45 percent of respondents), local nursing shortage (41 percent), and facility growth (28 percent). However, respondents added various other reasons such as: three-month training of permanent staff, long time needed to fill permanent vacancies, emergency needs and immediate availability of traveling nurses, experience of traveling nurses, and special projects. One large hospital in Florida stated, "Training of permanent staff is about three months. Graduates enter in January and May. January and [the end of the training period] explain a big portion of seasonal increase in census."

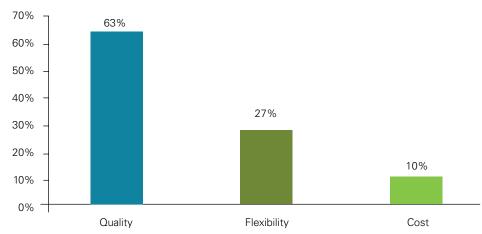




Note: (1) Multiple responses were allowed (2) n = 74Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study When prompted to rank cost, quality, and flexibility by level of importance when considering the use of traveling nurses, most respondents perhaps surprisingly ranked quality as most important, followed by flexibility, and then cost.

Quality was ranked as the most important factor by 63 percent of respondents, cost as next most important by 45 percent, and flexibility as least important by 51 percent.

What is the most important factor when considering the use of temporary/travel nursing staff (for direct care RNs): cost, quality, or flexibility?

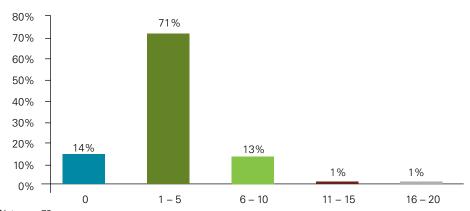


Note: n = 71 Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study

Most surveyed hospitals and facilities appear to use multiple service providers for their staffing needs of temporary nurses. The importance of quality in the selection of traveling and other temporary nurses suggests hospitals and medical facilities should make an informed decision in the selection of their service providers.

Approximately 71 percent of respondents stated that they use one to five different service providers for their temporary staffing needs, with an average of three service providers. Several respondents use even more than five service providers, but this may be impacted by the hospital's regional footprint.

#### How many different service providers do you use to staff your temporary nurses?

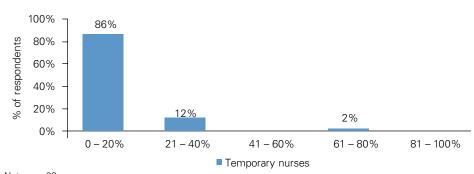


Note: n = 72 Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study

### Traveling nurses are widely utilized today and the future trend is upward

The average number of traveling or per diem nurses currently utilized at respondent hospitals and facilities is 35, leading to a ratio of 91:9 of full-time employed nurses to traveling nurses at these hospitals. This is in line with the 90:10 ratio, which respondents on average feel is the ideal ratio of full-time employed nurses to traveling or other temporary nurses.

Assuming cost and quality were equal, what is your ideal % use of temporary/per diem nursing (direct care RN) staff vs. full-time nurses?

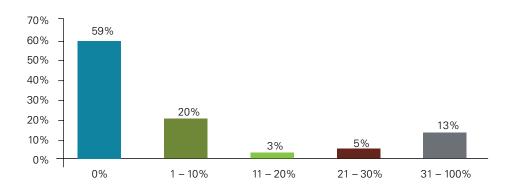


Note: n = 98 Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study

When asked about the expected or actually realized trend in usage and spend of traveling nurses in 2010 compared to 2009, 41 percent of respondents expected an increase in spend, 59 percent no change at all, but interestingly no one expected a decline in spend.

On average, respondents believe spend will increase or has increased 12 percent during 2010, and 13 percent of respondents even felt growth may be higher than 30 percent.

How do you expect the relative usage (spend) of traveling nurses to change in 2010 versus 2009 (in %)?



Note: n = 103 Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study

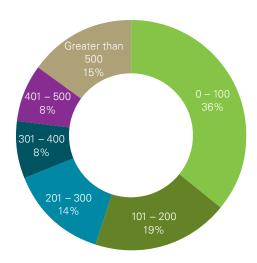
### **About the survey**

A total of 120 senior executives of U.S. hospitals and care facilities participated in the survey, including CEOs, chief administrators, COOs, CFOs, and directors of human resources.

The respondent hospitals are of various types and sizes, and are located throughout the United States a total of 36 percent of respondent hospitals have between 0 and 100 beds and 15 percent more than 500 beds. Almost three-quarters of respondent hospitals are located in the city.

The survey, which was conducted online, was executed between the end of 2010 and the start of 2011.

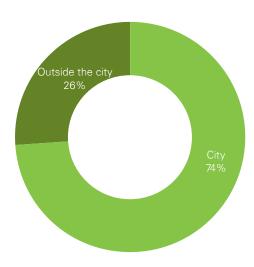
#### What is the total number of beds in the hospital?



Note: n = 117

Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study

#### Is the hospital located in the city or outside the city (e.g., in a rural area)?



Note: n = 118

Source: KPMG's 2011 U.S. Hospital Nursing Labor Costs Study

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